

5/19

D3233-041  
~~B22421A~~

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	22987
<b>Description:</b> Wheel Assembly	<b>Part Number:</b>	D3233-041
<b>Dwg:</b> D3233 Rev. B	<b>Qty:</b>	20 9
<b>Ref:</b>		Page 1 of 1

Step	Location	Procedure	By	Date	Qty																												
1	DC	Issue Traveler	KJ	05.04.13	20																												
2	MFA	<b>Pick:</b> <table><thead><tr><th>Qty</th><th>Part Number</th><th>Description</th><th>Batch</th></tr></thead><tbody><tr><td>2</td><td>D3233-7</td><td>Shaft Sleeve</td><td>B22927</td></tr><tr><td>2</td><td>D3233-9</td><td>Tire &amp; Rim Assembly</td><td>B22421A</td></tr><tr><td>2</td><td>D3233-5</td><td>Hub Sleeve</td><td>B22926</td></tr><tr><td>4</td><td>NKI 30/20</td><td>Bearing &amp; Inner Sleeve</td><td>M16867 M17346</td></tr><tr><td>8</td><td>Shim Stock</td><td>0.004" thick Brass Shim Stock</td><td>M17235</td></tr><tr><td>4</td><td>35x45x7</td><td>Axel Seal</td><td>M17346</td></tr></tbody></table> or CR 35x45x7 HMS4 R	Qty	Part Number	Description	Batch	2	D3233-7	Shaft Sleeve	B22927	2	D3233-9	Tire & Rim Assembly	B22421A	2	D3233-5	Hub Sleeve	B22926	4	NKI 30/20	Bearing & Inner Sleeve	M16867 M17346	8	Shim Stock	0.004" thick Brass Shim Stock	M17235	4	35x45x7	Axel Seal	M17346	CPL	05.05.04	9
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8	Shim Stock	0.004" thick Brass Shim Stock	M17235																														
4	35x45x7	Axel Seal	M17346																														
3	MFA	Press out bearings that are supplied with D3233-9 wheel and discard them.	CPL	05.05.04	9																												
4	MFA	Cut shims and assemble as per Dwg D3233	CPL	05.05.04	9																												
5	MFA	Spray inside hub and bearing with LPS-3 & block hole with a clean dry rag for storage.	CPL	05.05.04	9																												
6	QC5	Inspect work to Step 5	J	05.05.05	9																												
7	ST	Identify and Stock	CPL	05.05.05	9																												
8	AC	Cost / part: 358.32	Sgt	05.05.20	9																												
9	DC	Close W/O 271.65 Inspect Level 21	KJ	05.05.24	9																												

Rev	Date	Change	Revised By	Approved
A	05.01.12	New issue	KJ/JLM	
B	05.03.03	Made in house	KJ/JLM	

RELEASED  
05.03.15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

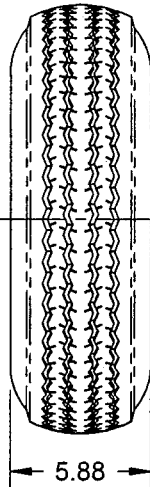
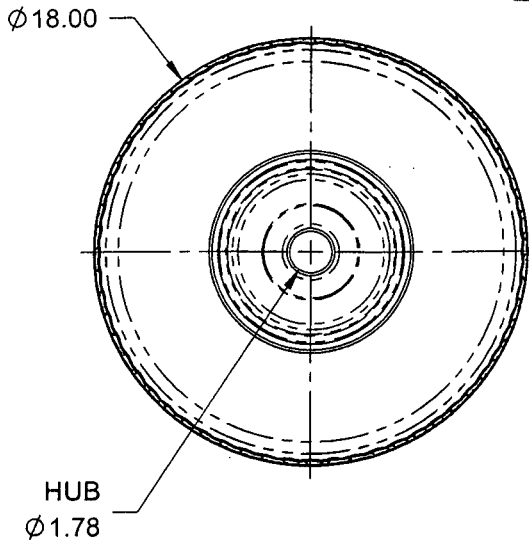
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

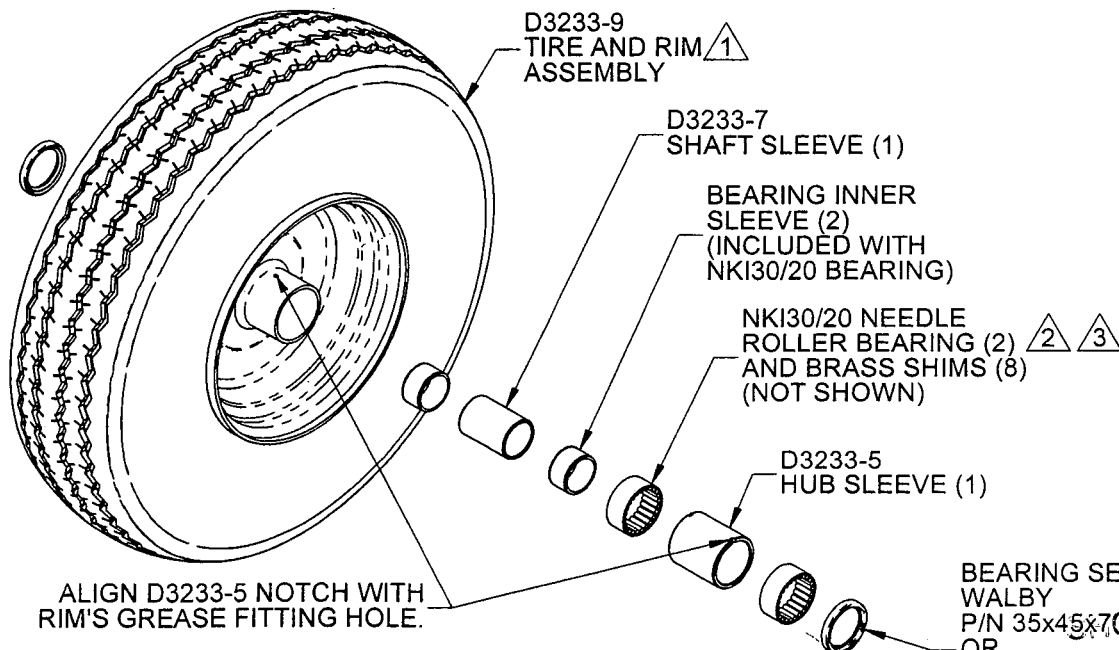
# PRELIMINARY ISSUE

DESIGN	DRAWN BY	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. <b>D3233</b>	REV. B SHEET 1 OF 3
DATE <b>05.03.08</b>		TITLE <b>WHEEL ASSEMBLY</b>	SCALE 1:1
A	05.02.18	NEW ISSUE	
B	05.03.08	ADDED BEARING SEALS	



WHEEL SPECIFICATIONS		
SIZE	MAXIMUM LOAD	MAXIMUM INFLATION LOAD
TIRE: 19.0 x 5.8 RIM: 5.70 x 8.0	910 LBS (RANGE C)	90 PSI*

\* MANUFACTURER'S RECOMENDATIONS ARE 75 PSI FOR HIGH SPEED USE.



## D3233-041 WHEEL ASSEMBLY

### NOTES:

- 1) POSSIBLE SUPPLIER: McMASTER-CARR, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH  
(4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT.
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

BEARING SEAL  
WALBY  
P/N 35x45x7 4 COPY  
OR  
CR 35x45x7-HMS4 R  
P/N 13927 ENGINEERING  
(2 PLACES)

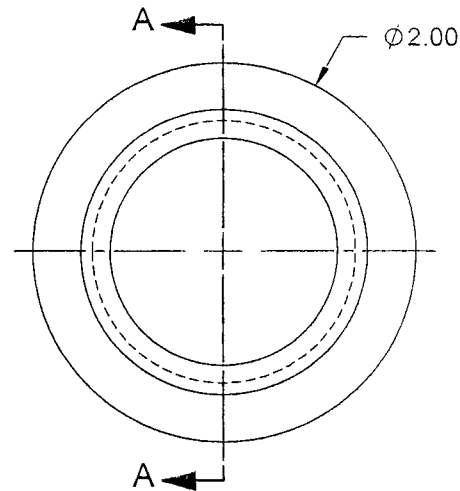
UNCONTROLLED COPY  
FOR AMENDMENT  
NOTICE

ORDER  
NO. 22987

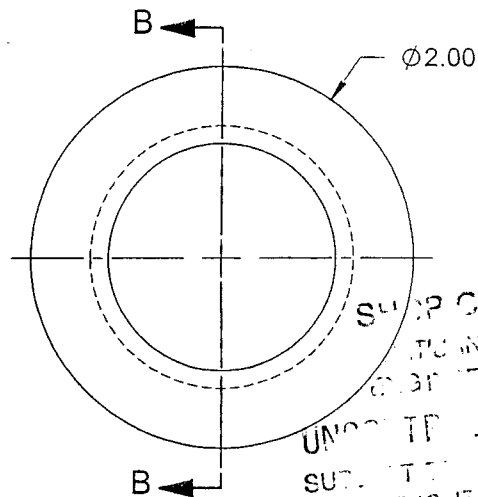
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DESIGN	DRAWN BY	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3233	REV. B SHEET 2 OF 3
DATE 05.03.08		TITLE WHEEL ASSEMBLY	SCALE 1:1



**D3233-1 INSIDE WASHER**



**D3233-3 OUTSIDE WASHER**

1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00  
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS  
(REF. DART SPEC. M1020TR)

2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

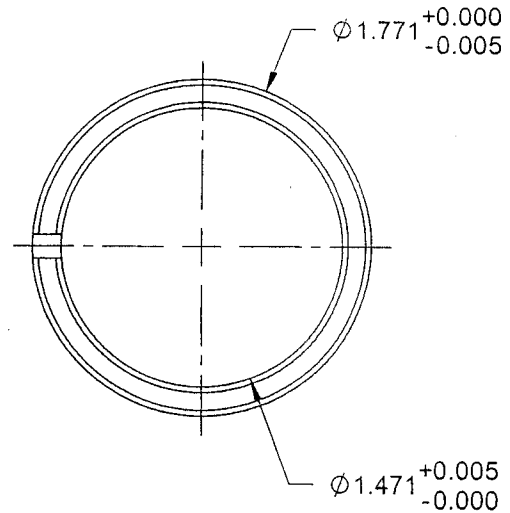
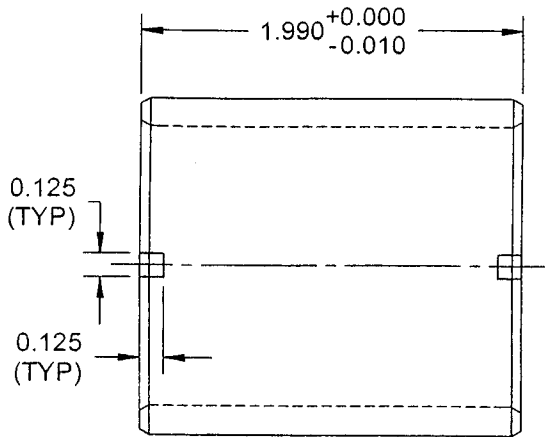
4) ALL DIMENSIONS ARE IN INCHES

5) BREAK ALL SHARP EDGES 0.005 TO 0.010

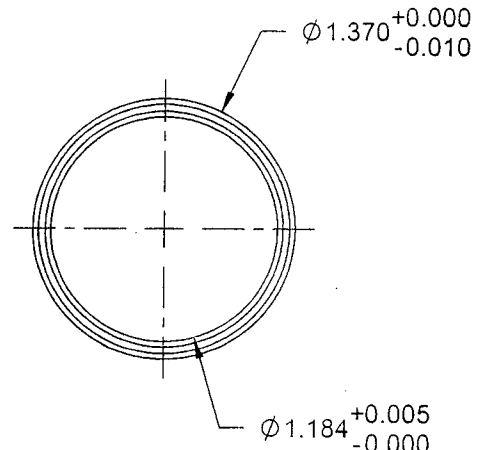
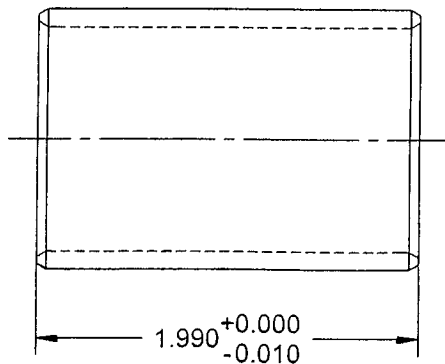
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PRELIMINARY ISSUE

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3233	REV. B SHEET 3 OF 3
DATE 05.03.08	TITLE WHEEL ASSEMBLY		SCALE 1:1



**D3233-5 HUB SLEEVE**



**D3233-7 SHAFT SLEEVE**

**NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00  
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.030

SHOP COPY

1.000

1.000 COPY

1.000

WORK ORDER

NO. 22987

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# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Apr 12, 2005  
02:25 pm

Work Order No : 0022987  
Project Name : D3233-041  
Project For : WK519  
Work Order Type : Main  
Main WO Number :  
House Part Number : D3233-041  
Description : Wheel Assembly  
Manufactured : Yes  
Amount Req'd : 20  
Amount Done : 0  
Start Date : 04-11-05  
Est Finish Date : 05-07-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Mark Up : 0.000%  
Actual Mark Up : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	0.00	0.00	0.00	0.00	0.00
Engineering Hours	0.00	0.00	0.00		
Engineering Cost	0.00	0.00	0.00	0.00	0.00
Production Hours	0.00	5.00	100.00		
Production Cost	0.00	80.35	100.00	0.00	80.35
Packaging Hours	0.00	0.00	0.00		
Packaging Cost	0.00	0.00	0.00	0.00	0.00
OverHead Hours	0.00	0.00	0.00		
OverHead Cost	0.00	0.00	0.00	0.00	0.00
CNC Hours	0.00	0.00	0.00		
CNC	0.00	0.00	0.00	0.00	0.00
Misc. Hours	0.00	0.00	0.00		
Misc.	0.00	0.00	0.00	0.00	0.00
Burden	0.00	0.00	0.00		
Total Cost	0.00	80.35	100.00		
Mark up	0.000	0.000			
Selling Cost	0.00	80.35			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	( -80.35)